Preliminary Classification:

Proposed Class:

Subclass:

NOTE:

WARNING:

"All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129." M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop PATENT APPLICATION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Ye-Kui WANG and Emre Baris AKSU

WARNING: 37 C.F.R.§ 1.41(a)(1) points out:

(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or names of the inventor or inventors."

Reducing Effects Caused by Transmission Channel Errors During For (title):

a Streaming Session

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date, <u>July 1, 2003</u>, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number <u>EV 252882774 US</u>, addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

tyt name of person mailing paper)

Signature of person mailing paper

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

> Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(New Application Transmittal [4-1] page 1 of 11)

1. Type of Application This new application is for a(n) (check one applicable item below) ☑ Original (nonprovisional) Design □ Plant WARNING: "Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 37(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application. WARNING: Do not use this transmittal for the filing of a provisional application. NOTE: If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION. Divisional Continuation Continuation-in-part (C-I-P)

2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designated the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120,121 or 365(c). (35 U.S.C. §§ 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 199, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

(New Application Transmittal [4-1] page 2 of 11)

WARNING:):	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).							
			The new application being transmitted claims the benefit of prior U.S application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S CLAIMED.							
3.	Pape	ers	Enclosed							
	<u>23</u>	1.15 Pag Pag	uired for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 3 (Design) Application ges of specification ges of claims ets of drawings							
	WAR	NINC	5: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).							
	NOTE:		"Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm (5/8 inch) down from the top of the page "37 C.F.R. § 1.84(c)).							
			(complete the following, if applicable)							
	[,	The enclosed drawing(s) are photograph(s), and there is also attached a 'PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. § 1.84(b).							
		i	The enclosed drawing(s) are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached. 37 C.F.R. §§ 1.84(a)(2) and 1.84(b).							
	×		ormal nformal							
	B . (Othe	er Papers Enclosed							
	<u>1</u> Pa		es of declaration and power of attorney es of abstract er							
4.	Addi	tior	al papers enclosed							
			ndment to claims							
	□ C th	and ne f ling	cel in this application claims before calculating ling fee. (At least one original independent claim must be retained for purposes.)							
	b	dd eer lain	the claims shown on the attached amendment. (Claims added have numbered consecutively following the highest numbered original is.)							

		Preliminary Amendment					
	X	Information Disclosure Statement (37 C.F.R. § 1.98)					
	X	Form PTO-1449 (PTO/SB/08A and 08B)					
	X	Citations					
		Declaration of Biological Deposit					
		Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence					
		Authorization of Attorney(s) to Accept and Follow Instructions from Representative					
		Special Comments					
		Other					
5.	Dec	claration or oath (including power of attorney)					
NOTE:		A newly executed declaration is not required in a continuation or divisional application provided that the prior nonprovisional application contained a declaration as required, the application being filed is by all or fewer than all the inventors named in the prior application, there is no new matter in the application being filed, and a copy of the executed declaration filed in the prior application (showing the signature or an indication thereon that it was signed) is submitted. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not inventors of the application being filed. If the declaration in the prior application was filed under § 1.47, then a copy of that declaration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning person under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently executed declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)-(3).					
NOTE:		A declaration filed to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name, without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 1.63(a)(1)-(4).					
NOTE:		"The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or names of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).					
		☐ Enclosed					
		Executed by					
		(check all applicable boxes)					
		□ inventor(s).					
		□ legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.					
		joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.					
		☐ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F. R. § 1.47 is also attached. See item 13 below for fee.					
		☑ Not Enclosed					

NO	TE:	con App may	ere the filing is a completion in the U.S. of an International Application or where the application of the U.S. application contains subject matter in addition to the International olication, the application may be treated as a continuation or continuation-in-part, as the case by be, utilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT PRIOR U.S. APPLICATION CLAIMED.						
Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of all the above named inventor(s).									
(The declaration or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) ca filed subsequently).									
			Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))						
6.	Inv	ent	orship Statement						
WARNIN		IG:	If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.						
The	e inv	ento	orship for all the claims in this application is:						
		The	e same.						
			or						
	□ Not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made,								
			is submitted.						
			will be submitted						
7.	Lar	ngua	age						
NOTE:		Eng of \$	An application including a signed oath or declaration may be filed in a language other than English. An English translation of the non-English language application and the processing fee of \$130.00 required by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may be set by the Office. 37 C.F.R. § 1.52(d).						
			English Non English						
			☐ The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).						
8.	Ass	sign	ment						
		X	An assignment of the invention to Nokia Corporation						
			□ is attached. A separate □ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or □ FORM PTO 1595 is also attached.						
			☑ will follow.						
NOT	E:	"If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).							

(New Application Transmittal [4-1] page 5 of 11)

WARNING:		A newly e continuation 62-64.	xecuted n-in-part	*CERTIFIC application	ATE UNDER	R 37 n ass	C.F.R. § 3.7. signee. Notice	3(b)" must be filed of April 30, 1993, 1	when a 150 OG				
☐ This is for the		a □ continuation □ divisional application and the assignment document arent application 0 / was filed on											
							Reel _		_				
								e					
9. Ce	ertifie	d Copy											
Ce	ertified	d copy(ies	s) of ap	plication(s)								
Co	ountry	,	•		Appln.	No.			Filed				
Co	ountry	,			Appln.	No.			Filed				
from w	/hich	priority is	claime	d:									
		is (are) a will follov	ttached										
	or de This pare unde item OF F	eclaration. 3 item is for nt U.S. apper 35 U.S.C. 18 on the PRIOR U.S.	7 C.F.R. any fore blication § 120 is ADDED APPLICA (37 C.F	§ 1.55(a) a ign priority or Internati is itself entit PAGES FO ATION(S) O	nd 1.63. for which the conal Applica led to priority DR NEW API CLAIMED.	e app tion f	lication being from which thi a prior foreign	ust be referred to in filed directly relates is application claims in application, then community where B	If any benefit omplete				
				CLA	IMS AS F	ILEC)		_				
Numbe	er file	d		Num	ber Extra		Rate	Basic 37 C.F.R. § 1.1 \$750	6(a)				
	F.R. §	1.16(c))	23 -20	= 3		×	\$18.00 =	54.00	<u> </u>				
		t Claims 1.16(b))	6 - 3	= 3		x	\$84.00 =	252.0	0				
		endent cl .F.R. § 1.				+	\$280.00						
NOTE:		Amendm Fee for e	ent dele xtra cla	eting mul ims is no	t being pai	den d at	cies is encle this time.		alad bii				
NOIE.	amer	ndment, pri	or to the	expiration	of the time	pen	o must be paid fod set for re: F.R. § 1.16(d).	d or the claims cand sponse by the Pate	eied by ent and				

Filing Fee Calculation

\$ <u>1,056.00</u>

(New Application Transmittal [4-1] page 6 of 11)

	В.		Design application (\$310.00 - 37 C	on .F.R. § 1.16(f))		
				Filing Fee Calcu	ulation	\$
	C.		Plant application			
	•		(\$480.00 - 37 C.	F.R. § 1.16(g))		
				Filing Fee Calcu	ulation	\$
11. Sm	all E	Entit	y Statement(s)			
	Sta 1.2	teme 7 is (ent(s) that this is (are) attached.	a filing by a sm	all entity under :	37 C.F.R. §§ 1.9 and
WARNIN	G:	whice pate whice has divis 1.53 entite application the in the desired	h the status is availant does not affect and in here directly or indin been established. ion, or continuation-(d)), or the filing of a lement to small entity ication claiming benication, or a reissue a patent if the nonproe statement in the price prior application of a price and in the price prior application of a statement in the price pri	able and desired. The refiling of an in-part (including a reissue application status for the continuity under 35 U.S.) The proposition of an in-part (including a reissue application status for the continuity under 35 U.S.) The space of application or application or in in the patent and the small entity base.	Status as a small en or patent, includir on the application under sa continued prosecution of the requires a new determing or reissue application on a statement filed or the reissue applicated a status as a small sic statutory filing feets	ch application or patent in ntity in one application or a patents or patents patent in which the status in 1.53 as a continuation, a continued a patent in which the status in 1.53 as a continuation, at on application as to continued alication. A nonprovisional in the prior application or ation includes a reference as a copy of the statement entity is still proper and a will be treated as such a
WARNIN	G:	state	ment can unequivo rev. 2, July 1996 (em _l	ally make the requ phasis added).	uired self-certification	or persons signing the
		_			ing, if applicable	
			Status as a smal	-		
			benefit is being o	, filed or laimed for this a	n application under	, from which
			35 U.S.C. § I I I	□ 119(e), □ 120, □ 121, □ 365(c),		
			and which st	• • •	entity is still prop	er and desired.
			☐ A copy o	f the statement	in the prior appli	cation is included.
			Filing Fe	e Calculation (5	0% of A , B , or C	above)
					\$	
NOTE:	an	e filed	eess of the full fee pai I within 2 months of i Indable under § 1.130	he date of timely pa	ayment of a full fee.	nent and a refund request The two-month period is
12. Req	lues	t for	International-T	pe Search (37	C.F.R. § 1.104(d))
			(co	omplete, if appli	cable)	
	Plea time	se p whe	orepare an intern en national exam	ational-type sea nation on the m	arch report for the erits takes place	nis application at the

(New Application Transmittal [4-1] page 7 of 11)

13. Fee Payment Being Made at This Time ☑ Not Enclosed No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. § 1.16(e) can be paid subsequently.) □ Enclosed ☐ Filing fee \$_ □ Recording assignment (\$40.00 - 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING **NEW APPLICATION.")** Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. (\$130.00 - 37 C.F.R. §§ 1.47 and 1.17(i)) For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k)) Processing and retention fee (\$130.00, 37 C.F.R. §§ 1.52(d) and 1.21(l)) Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e)) NOTE: 37 C.F.R. § 1.21(I) establishes a fee for processing and retaining any application that is abandoned for failing to complete the application pursuant to 37 C.F.R. § 1.53(f) and this, as well as the changes to 37 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee must be paid, or the processing and retention fee of § 1.21(I) must be paid, within 1 year from the notification under § 53(f). Total fees enclosed 14. Method of Payment of Fees ☐ Attached is a ☐ check ☐ money order in the amount of \$_____ ☐ Authorization if hereby made to charge the amount of \$_____

NOTE: Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37 C.F.R. § 1.22(b).

☐ Charge any additional fees required by this paper or credit any overpayment the manner authorized above. A duplicate of this transmittal is attached.

authorization form PTO-2038

to credit card as shown on the attached credit card information

to Deposit Account No.

15. Authorizati n to Charge Additional Fe s

WARNING:		If no fees are to be paid on filing, the following items should <u>not</u> be completed.										
WARNING:			Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.									
		The Commissioner is hereby authorized to charge the following a fees by this paper and during the entire pendency of this applic Account No										
			37 C.F.R. § 37 C.F.R. §						of extra	a clain	ns)	
	pres the 1.16	entati time (d)), i	additional fees on must only be period set for i it might be bes when dealing wi	e paid or the response l at not to a	nese clain by the P. uthorize	ns cancel T.O. in a the P.T.C	led by a any not D. to ch	mendmice of t	ent prid ee defi	or to the iciency	expirat	tion of F.R. &
			37 C.F.R. § declaration									-
			37 C.F.R. §	1.17(a)(1)-(5) (є	extensio	n fees	s pursi	uant to	§ 1.1	36(a)))
			37 C.F.R. §	1.17 (ap	plicatio	n proce	ssing	fees)				
WARNING:		for its lengt requirement time parage treater petitic	written request urrent or future s timely submis h of time. An red extension of in any concurregraph for its timed as a construon for an extension(3).	reply, requision, as indicated	uiring a po corporatination to case will be to e reply resision. Su con for an	etition for og a petiti harge all reated as quiring a bmission extensior	an extended and ex	ension of extension of the second fees, of the	of time of time of time, fees of petition extension forth in g	under to be for the under { in for ar on of ti § 1.17(a rent rep	his para le appro § 1.17, le extens me unde a) will all oly requi	graph priate or all ion of er this lso be iring a
			37 C.F.R. Allowance, p						mailir	ng of	Notice	e of
mai		ere an authorization to charge the issue fee to a deposit account has been filed before the ling of a Notice of Allowance, the issue fee will be automatically charged to the deposit ount at the time of mailing the Notice of Allowance. 37 C.F.R. § 1.311(b).										
to : i be		C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement small entity status must be filed in the application prior to paying, or at the time of paying, . issue fee." From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must made even if the fee is paid as "other than a small entity" and (b) no notification is required if e change is to another small entity.										

16. Instructions as t Overpayment

NOTE:	"Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).
	□ Credit Account No
	□ Refund

Date: July 1, 2003

Reg. No. 27,550

Tel. No. (203) 261-1234

Customer No. 004955

SIGNATURE OF PRACTITIONER

Alfred A. Fressola

(type or print name of practitioner

Ware, Fressola, Van Der Sluys & Adolphson, LLP

P.O. (Correspondence) Address

Building Five, Bradford Green 755 Main Street, P.O. Box 224 Monroe, CT 06468

(New Application Transmittal [4-1] page 10 of 11)

	Inc	rp ration by reference of added pages					
	(check the following item if the application in this transmittal claims the benefit of prior U.S. application(s) (including an international application entering the U.S. stage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.)						
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed					
		Number of pages added					
		Plus Added Pages for Papers Referred to in Item 4 Above					
		Number of pages added					
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.					
		Number of pages added					
		Plus "Assignment Cover Letter Accompanying New Application"					
		Number of pages added					
X	Sta	tement Where No Further Pages Added					
		(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item.					
	X	This transmittal ends with this page.					